Applicants: Guy VERGNAULT, et al.

Serial No.: 10/538,344

Listing of Claims:

This listing of claims will replace all prior versions and listings of claims in the application:

1. (Previously presented) A stable topical nanoparticulate spironolactone formulation comprising nanoparticles of spironolactone incorporated into a crystalline network of polar lipids, wherein the nanoparticles of spironolactone have a mean diameter measured by photon correlation spectroscopy in the range of from about 300 nm to about 900 nm.

- 2. (Previously Presented) The formulation according to claim 1, comprising nanoparticles having a mean diameter, measured by photon correlation spectroscopy, in the range of from about 400 nm to about 600 nm
- 3. (Previously Presented) The formulation according to claim 1, wherein the lipid has a crystallization temperature of between 20°C and 100°C.
- 4. (Previously Presented) The formulation according to claim 1, wherein the crystalline network of polar lipids is formed from β crystals of a monoglyceride of a fatty acid having 12-18 carbon atoms, or ascorbic, phosphate or lactic esters of fatty acids or of monoglycerol ethers, or mixtures thereof.
- 5. (Previously Presented) The formulation according to claim 4, wherein the monoglyceride is 1-monolaurin, 1-monomyristin, 1-monopalmitin, or 1-monostearin, or a mixture of two or more thereof.
- 6. (Previously Presented) The formulation according to claim 1, wherein crystalline network structures of polar lipids are formed within a polar liquid.
- 7. (Previously Presented) The formulation according to claim 6, wherein the polar liquid is selected from water, glycerol, ethylene glycol, propylene glycol, or mixtures thereof.
- 8. (Previously Presented) A method of treating one or more of acne, hirsutism, androgenic alopecia, or rosacea, comprising topically applying to a subject in need thereof the nanoparticulate spironolactone formulation according to claim 1.

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Serial No.: 10/538,344

9. (Previously Presented) The formulation according to claim 1, wherein active drug is incorporated in the form of a nanosuspension.

- 10. (Previously Presented) The formulation according to claim 9, wherein the nanosuspension is an aqueous nanosuspension.
- 11. (Previously Presented) The formulation according to claim 10, wherein the nanosuspension comprises a stabilizer.
- 12. (Previously Presented) The formulation according to claim 11, wherein the stabilizer is sodium docusate.
- 13.-17. (Cancelled)
- 18. (Previously Presented) A method of treating a condition that responds to antiandrogens comprising: administering a stable nanoparticulate spironolactone formulation according to claim 1 to a patient in need of such treatment, wherein said condition is acne, hirsutism, androgenic alopecia, or rosacea.
- 19. (Cancelled)
- 20. (Cancelled)
- 21. (Previously Presented) A process for the preparation of a stable topical nanoparticulate spironolactone formulation comprising: dispersing nanoparticulate spironolactone into a mixture of polar lipids and a polar liquid at a temperature below the transition temperature of the lipid but above the temperature at which the lipid crystalline structure is fully formed.
- 22. (Previously Presented) A method of treating a condition that responds to antiandrogens, comprising administering a stable topical nanoparticulate spironolactone
 formulation comprising nanoparticles of spironolactone incorporated into a crystalline
 network of polar lipids in an amount effective to treat the condition, wherein said condition is
 acne, hirsutism, androgenic alopecia, or rosacea, and wherein the nanoparticles of
 spironolactone have a mean diameter measured by photon correlation spectroscopy in the
 range of from about 300 nm to about 900 nm..

Applicants: Guy VERGNAULT, et al.

Serial No.: 10/538,344

23. (Previously Presented) The method according to claim 8, wherein spironolactone active drug is incorporated into the formulation in the form of a nanosuspension.

- 24. (Previously Presented) The method according to claim 18, wherein spironolactone active drug is incorporated into the formulation in the form of a nanosuspension.
- 25. (Previously Presented) The formulation according to claim 1, wherein said nanoparticles do not grow following seven months in storage at room temperature.
- 26. (Previously Presented) The method according to claim 21, wherein said nanoparticles do not grow following seven months in storage at room temperature.
- 27. (Previously Presented) The method according to claim 22, wherein said nanoparticles do not grow following seven months in storage at room temperature.